



USPN: 09/844,186

IN THE CLAIMS

Atty. Dkt. M00B107

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1. (currently amended) A method of friction stir welding together at least two metallic workpieces, including the step of applying at or adjacent a heated welding zone a cryogen in the form of at least one jet to cool said weld zone; thereby reducing tensile stresses in said welding zone and creating compressive stresses in said welding zone.
2. (previously presented) The method claimed in Claim 1, in which the cryogen is a liquid cryogen.
3. (previously presented) The method claimed in Claim 2, in which the liquid cryogen is nitrogen.
4. (previously presented) The method claimed in Claim 2, in which the liquid cryogen is argon.
5. (previously presented) The method claimed in Claim 1, in which the cryogen is solid carbon dioxide.
6. (previously presented) The method claimed in Claim 1, in which the cryogen is a mixture of solid carbon dioxide and a liquid cryogen.
7. (previously presented) The method claimed in Claim 1 wherein the workpieces are of aluminium or an aluminium alloy.